

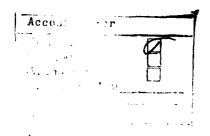
Nehemiah/Jordan ogistics Department The RAND Corporation

P-2273

April 10, 1961

10 Apr 67

14) RAND/P-2273



To be submitted for Journal Publication

Reproduced by

The views expressed in this paper are not necessarily those of the Corporation

DISTRIBUTION STATEMENT A

Approved for public releases Distribution Unlimited

THE APPLICATION OF HUMAN RELATIONS RESEARCH TO AUMINISTRATION

Nehemiah Jordan

The RAND Corporation

Those who have tried to apply the results of academic research on human relations to real life problems in organizations are well aware of the pitfalls that bestrew this path. These pitfalls have at times had so undesirable an effect that the opinion is voiced, occasionally in print but more often after a cocktail or two, that academic research is inapplicable, is irrelevant. But this may be the throwing of the baby out with the bath. There are very good reasons why the results of academic research cannot be simply applied to line organizations. Many of the pitfalls met with in their application stem directly from not taking these reasons into account.

The purpose of this paper is threefold; an attempt will be made to:

- I. Spell out at least some of the reasons which make the simple application of academic research difficult;
- II. show that this research, even as it is, can be of help to administrators (and)
- III. suggest a way of facilitating communication between administrators and academic investigators to their mutual benefit.

I. THE GAP BETWEEN ACADEMIC RESEARCH AND ITS PRACTICAL APPLICATIONS

At least three reasons seem to stand out as important contributors to the difficulties met with when men of good will attempt to apply the results of research in academic human relations laboratories to live situations.

They stem from:

- 1. The goals of the academic investigator.
- 2. The analytical techniques used in academic investigations.
- 3. The research settings and research problems available in universities.

1. The Goals of the Academic Investigator

The liberal arts college, where most of the research in human relations takes place, is by and large dedicated to 'pure research'. Pure research is abstract-theory-oriented and attempts to answer ultimate questions as to the nature of the world. It is, as a result, rarely oriented to solve specific every-day problems. Just as the laboratories studying physical phenomena attempt to set up 'ideal' situations that are never met with in the world at large in order to identify the laws of physics, so do the social-psychologists who try to study human relations. They too try to set up ideal situations, uncontaminated by many of the contingent factors to be found in real life, to enable them to identify and quantify the laws of human relations.

Society has to pay a price for this kind of research in 'sterile, antisceptic' laboratories. The results of this research, be it in the physical or psychological domains, cannot simply or directly be applied to specific problems in the every day world. The formula showing that an atom bomb was possible was enunciated by Einstein in the first decade of our century. It took more than three decades and the threat of a war to translate this formula into an actual atom bomb. Many of the disappointments and frustrations encountered in applying academic research to real life situations can be traced to an overenthusiasm of both the academic investigators and the practitioners. It takes much work and often a long time before that which

is found to hold in an academic laboratory can be efficiently applied to a real life situation.

The goal of academic investigators determines to a very great extent the analytical techniques used in academic research. And this leads us directly to the second reason.

2. The Analytical Techniques Used in Academic Research

The classical model of laboratory research is the essence of simplicity. In order to identify the laws underlying observed phenomena one must first identify the factors which affect the phenomena studied. Then one must set up a laboratory situation containing these factors in such a manner that the experimenter can control them. Once this is achieved the experimenter varies the factors systematically and records the effects of this controlled variation. To the extent that these effects can be reduced to some logical order, laws of nature are identified.

This has worked excellently for the physical sciences. In attempting to apply this model to the social sciences, investigators ran into a serious difficulty. Although it is often possible to set up a laboratory situation containing many of the factors affecting social phenomena, it is generally impossible to exercise the kind of control achievable in a physical laboratory. It is generally possible to vary one or two factors systematically, but it is almost never possible to keep the others constant. In order to mitigate the uncontrolled variation of these other factors the social scientist has had to take recourse to statistics.

Again a price has to be paid. Statistics enables the investigator to formulate general laws of a special sort. These laws take the following form: if for a given situation a person will take an action A, he can

expect on the average that it will lead to the result B. The academic investigator is generally satisfied with such results and he goes on to explore other problems which interest him. But statistical laws, by their very nature, cannot predict the outcome in individual cases, and the manager of a real life organization is always confronted with an individual case. The statistical law cannot tell him, for his particular problem, how far he actually will deviate from the average outcome and how costly that will be. It is often the case that because of contingent circumstances to be found in a particular situation the law found in academic laboratories should not be applied for that situation.

3. The Research Settings and Research Problems Available in the Universities

Social science laboratories are at a distinct disadvantage when compared to the laboratories of the physical sciences in this area. Despite the fact that the physical laboratories set up 'ideal' situations not to be found outside the laboratory, the physical microcosm of the laboratory is essentially identical with the physical microcosm of the world at large. This does not hold for psychological laboratories. The psychological microcosm of the laboratory is generally quite different from the psychological microcosm of the world at large. This for two simple reasons. The overwhelming number of subjects in psychological experimentation on human relations are undergraduate adolescent students; they are available to the investigators and relatively easily coercible to become subjects. In addition, most of the group tasks that can be set up within the confines of a university laboratory have the psychological nature of a game; that is, regardless of how subjects perform in the laboratory, this performance will have no effect on their real life situation.

It is dangerous to generalize from how a person plays 'monopoly' to how he behaves as a manager of a real-estate investment firm. A professional gambler exhibits an entirely different style of playing when he plays with his peers for 'fum', than when he plays with a 'pigeon' for business. Many factors that play a very important role in real life which involve an individual's economic future, his social status, his self-respect, etc., just cannot be introduced into most psychological experimentation. If these are not taken adequately into account in applying the results of academic research, the consequences may be quite undesirable.

Nevertheless academic research should not be belittled. It enables us to clarify concepts by carefully observing the effect they have in the controlled laboratory situations. Nost of these concepts are not revolutionary. They generally underlie the actions of the successful administrator. But he tends to follow them in an implicit intuitive manner, having neither the time nor the facilities to make these concepts explicit. To the extent that these concepts can be made explicit per se, as well as how they do affect organizational life, it will enable the administrator to function more effectively. He will find himself in a better position to objectively evaluate the consequences of his actions. It is in making these concepts explicit that academic research is already of use to the administrator.

Some significant concepts and their implications for effective administration that have been identified by academic research will be presented and briefly discussed in the next section of this paper.

II. CONCEPTUAL CONTRIBUTIONS OF ACADISMIC RESEARCH ON HUMAN RELATIONS

1. Group Atmosphere

In a series of what can now be called classical experiments, White and Lippit⁽⁵⁾ investigated the effect of different styles of leadership on the behavior of small groups of children. These groups were given the task of constructing masks for an exhibition. The group leaders, assigned by the experimenters, were trained to act in three roles: as 'democratic' leaders, as 'authoritarian' leaders, and as 'laissez faire' leaders.

When playing the 'democratic' role the leaders encouraged and facilitated the group to reach decisions on the masks to be made and how to organize the work. As 'autocrats' the leaders just told the children what to do without any consultation on their part and without any explanation for their decisions. And finally, as 'laiseez faire' leaders they just sat back without intervening with the group activities but just answered questions if and when asked.

Every leader played each of the three roles for at least one group, and every group was subjected to each type of leadership. The type of leadership generated an atmosphere which was quite striking. Almost all the observable aspects of group functioning were affected in a striking manner by this atmosphere. Individual differences, both among the leaders and within the groups played a small role in the differences of behavior that were observed.

Some of the major observed differences can be summarized, all too inadequately, as follows: Groups subjected to 'authoritarian' leadership made many masks. They showed very little initiative, however, and almost always stopped their work when the leader left the room. In addition, the

masks they did produce were quite unimaginative; were quite dull. Under 'democratic' leadership, the groups made a slightly smaller number of masks, but the quality of masks were quite superior. The groups set their own pace and worked industriously whether the leader was present or not, i.e., they were self-motivated and the leader could depend upon them to do the job to the best of their ability spontaneously. With 'laissez faire' leadership the group found the task dull and boring. They produced a small number of relatively unimaginative masks. The significance of leadership upon group behavior and performance, and the many different subtle ways by which the leadership has its impact, has rarely been demonstrated in so clear and brilliant a manner as in these experiments. By studying them carefully we truly get a tangible feeling for what 'group atmosphere' actually is.

L

In these laboratory studies the leadership roles were presecribed by
the experimenters; in organizations the behavior of the leaders, of the
bosses and foremen, will, willy nilly, induce an atmosphere. All too
often this atmosphere is unknown to them and contrary to their intentions.

It is easy to find leaders who try to be 'democratic' but induce an
'authoritarian' atmosphere; or who try to be 'authoritarian' while inducing
a 'laissez faire' atmosphere. Things cannot go smoothly under such conditions.

The consequent frustrations and tensions of both the leader and his group
cannot but generate organizational conflicts which cause an overall decrement
in organizational efficiency.

Group atmosphere is so general a concept that most, if not all, the concepts to be discussed below can be considered to be special aspects of it.

2. Commitment

A person will administer a policy or do a job better if he is committed to it. How does one achieve a greater degree of commitment on the part of members of an organization?

One of the most effective ways of inducing commitment is by involving the persons concerned either in formulating the policy or, more commonly, in formulating those aspects in the policy implementation for which they will be responsible. People will feel themselves committed to policies to the extent that they feel that they were given an opportunity to participate in their formulation. It is not necessary for them to take advantage of this opportunity; all that is needed is for them to feel that had they wanted to, they could have.

It follows therefore that when it is desirable to introduce procedural changes in a hierarchical organization, the specific changes should be formulated, to the extent that it is feasible, by the members of the lowest hierarchy to be affected and then forwarded upward for approval. When an administrator at any hierarchical level approves a policy formulated from below, he has the feeling that had he wished, he could have modified it, i.e., he has 'freely' accepted it and it was not imposed upon him. This feeling would be lacking were the identical policy to be handed to him for implementation from above. The commitment of the entire staff is consequently greater to policies which they know were formulated at the lower levels of the organization and which were reviewed and 'freely' accepted by all concerned. This overall commitment would be maintained despite many modifications of the procedures that higher echelon management may introduce. (The next section will touch upon the conditions under

which lower echelon people are tolerant and acceptant of decisions coming from above.)

In doing a specific job individual commitment to the job is directly related to the degree of actual responsibility relegated to him. If no actual responsibility is delegated to a man, he cannot experience any commitment to the job. And this responsibility must be really relegated. It happens all too often that despite the delegation of formal responsibility to an individual, his superiors do not trust him and express this by overbearing supervision. Under these conditions formal responsibility is meaningless; in fact it may create conflicts within the individual so that his performance will be poorer than were he given no responsibility whatsoever.

In a fascinating account of how a textile factory using semi-automatic production machines was introduced in India⁽³⁾ A. K. Rice of the Tavistock Institute in London tells of the great impact upon efficiency in production which followed the real relegation of production responsibility to teams of five -- each team responsible for a group of machines. The teams, in turn, allocated responsibility to each individual within them.

It is easier to induce individual commitment to the extent that the morale or esprit de corps of the organization is high. And this leads us to the next concept to be discussed.

3. Morale or esprit de corps

Research on morale, both in military and industrial organizations, seems to lead to the not surprising conclusion that the level of morale is most closely related to how the individuals involved perceive the administrators who have power over their destiny within the organization. To the

extent that such administrators are perceived as being fair and able, morale is high.

An administrator is perceived to be fair if it is believed that before making a decision he takes into account, to the <u>best</u> of his ability, the interests of all those who will be affected by the decision. If an administrator is so perceived then individuals will tend to willingly accept decisions even though they may harm them slightly. People are quite reasonable when they have faith in the fairness and ability of the administrator; they will accept the fact that the demands of the objective situation forced the administrator to make a decision which has adverse effects upon them. Since they believe that the administrator did weigh the interests of all involved to the best of his ability then it follows that had he been able to make another decision he would have.

Finally, if an administrator is perceived as being fair, he is permitted to make a larger than average number of reasonable mistakes before being perceived as incompetent.

4. Non-evaluative Feedback on an Individual's Performance

This is a poor formulation of a principle which has caused much trouble to those attempting to apply it. These words mean that in discussing the performance of another person in relation to a specific organizational or team goal the objective efficacy of the performance for reaching the goal should be evaluated, not the person per se. It is relatively easy for two intelligent people to reach a consensus about a concrete practical problem which, so to speak, stares them in the face if personal considerations as to whether they are good or bad do not enter into the discussion. When personalities enter a discussion this is generally accompanied by an

emergence of defensive behavior which masks the real intentions of the actor and is consequently ruinous to effective problem solving. It is not by chance that the word 'personality' has evolved from the Latin word 'persona' which means 'mask'.

The need for this type of objective feedback on one's performance grows greater as our organizations become more complex and the dependency among individuals grows. The specific jobs assigned to individuals tend to contribute less and less to the goals of our growing organizations as they become more and more complex. It becomes difficult, if not impossible, for an individual to objectively evaluate his strengths and weaknesses in his contribution to the organization effort. Something he does well may be vitiated by actions of the man who takes over after him; a mistake he makes may be discovered so much later that it is difficult to identify its specific cause. In order to be able to do their job efficiently and in order to be able to improve themselves in their job, men need to know where they stand.

Lack of objective knowledge of one's performance leads to refusal to assume responsibility, passing the buck, window dressing, etc., leads to a host of undesirable phenomena. For efficient organizational function it becomes quite important to develop channels to feed back objective, non-evaluative information on an individual's performance.

The problem of feedback is more inclusive than merely the individual's performance. And this leads us to the next concept.

5. General Feedback and the Meaning of a Situation

People do not like to do meaningless jobs and/or be subjected to meaningless constraints. No person will deliberately ask another person to do scmething the other does not understand. In training a person to do a job, a good training program always includes an explanation of the meaning of the job. What is often neglected, however, is the fact that the meaning of a job or task per se is dependent to a very large extent upon its role or meaning for the entire system or organization in which it is embedded. No matter how well an individual knows his specific job this knowledge is often useless unless he also knows how his job fits into the larger picture. The neglect of this aspect is generally due to the fact that to the supervisor or experienced person who teaches the novice, this knowledge appears to be self evident. But this is often not so -- what is self evident to an expert may be quite a mystery to a novice.

Unless the novices are given reliable information on the subject they will formulate their own explanation which will most probably be wrong.

And this latter development can lead to trouble in human relations, especially in times of change or crisis. When a person has a wrong model of things, then the actions of others relating to these things appear to be either meaningless or stupid. This causes misunderstanding and conflict. In addition, as mentioned earlier, a person will tend to accept constraints if he sees them as being meaningful and fair, he will resent them if they are not understood. There are many ways in which resentment can be expressed by a group or team member, and almost always they are detrimental to the group or to the team.

Since an organization is a dynamic entity, i.e., it exists in a changing environment and is subject to its own internal changes, it is preferable that permanent channels of feedback exist that inform the members of the organization of relevant changes that take place. Of course, if such channels are perceived as being management propaganda outlets, they will have an undesirable rather than a desirable effect.

6. Creativity in Organizations

Almost more than any other aspect of behavior, imaginative and creative behavior are subject to the dictates of group atmosphere. This has been eloquently argued by creative thinkers throughout time, since it was part and parcel of their personal experience. In the 1890's the philosopher-psychologist Josiah Royce⁽⁴⁾ instructed groups of students to draw abstract line drawings. To some of the groups he added the suggestion to be imaginative. These latter groups produced far more drawings numerically and of a more complex nature qualitatively than did the group who were not reminded to be imaginative.

Let us not jump to conclusions however. If creative behavior is sought, it is insufficient that it be just enunciated as a desirable policy. The total organization must be such as to encourage and facilitate creative behavior. And this is easier said than done.

A necessary, and perhaps sufficient, condition for generating creativity is the creation of a setting that facilitates a type of critical discussion revely found nowadays. We seem to have lost the knack of criticizing another person's ideas objectively. Criticism of another is generally perceived as a statement that the other is stupid. Since it is impolite to call another person stupid, unless we wish to harm him, we tend to tone criticism down until it becomes ineffective or to interpret it as a personal attack. It is only by subjecting ideas to a harsh honest critique that the 'fool's gold' among them will be differentiated from the real precious metal. But even more than that, living in the challenging and exciting environment generated by honest criticism sharpens individuals to formulate the most precise ideas that they are capable of.

We recognize the lack of this atmosphere in establishing the 'brain storming' session. What is the definition of such a session? Aren't the participants in such sessions told, either implicitly or explicitly, that the ideas they are expected to toss out will not be perceived as their considered judgments so that they ought not take umbrage at criticism? Such sessions succeed only to the extent that the participants manage to overcome the inhibitions imposed by the cultural atmosphere and do get involved in a heated argument, no holds barred.

7. The Role of Personality in Organizational Functions

6

It may be questioned why the concept of personality should be introduced in the present context. After all, this is one concept which organizations have accepted from the academic world and have applied in various ways in attempts to solve administrative problems. There is an opinion gaining ground, however, that were we able to add the accounts on both sides of the ledger, we would find that the net effect of paying attention to 'personality' has been detrimental rather than beneficial.

'Personality' has been overused and misused. And this for several reasons.

First it must be remembered both the tests measuring personality and the relationships between the measurements and various kinds of performance are based upon statistical analyses. Their predictive power, their reliability as guidelines for action in individual cases or when an administrator has to choose between a few people, is consequently quite tenuous. Now add to this the creeping suspicion that the personality tests are basically not valid, i.e., they certainly measure something but how that something is related to personality is nebulous; Whyte's critique in 'The Organization Man' (6) of the use of personality tests by industry is very well taken.

It is therefore reasonable to suspect and doubt the extent to which administrators should depend upon personality tests in making administrative decisions concerning people.

Secondly, even were the tests valid and an ideal person for a given slot could, in theory, be found, for most organizations this would be functionally impossible. They just do not have a pool of people large enough from which to select the ideal personality. They have to learn to make do with what they have. Although it assuages his ego if the administrator can sit back, when things go wrong, and sigh to himself: "Damn these personalities; if I only had the right guy for the job", it certainly is of no use in solving the problems that exist. To achieve an efficient organization the administrator has to so structure the jobs to be done, that the people he is stuck with can back it well. This is not too difficult; this is actually done every time an administrator solves a knotty conflict in his organization, even though later, when he sits back to contemplate and evaluate his actions, he may again sigh yearningly for the ideal personality and order the purchase of the nowest edition of a well publicized personality test. And this leads us directly to the third, final, and probably most important point.

Careful, controlled observation of experimental groups attempting to achieve a common goal has forced investigators to the conclusion that personality conflicts are generally symptoms rather than causes. They are the symptoms of difficulties which the groups have with objective problems that they cannot solve and which hamper the schievement of their goal. In a paper presented at the 1961 American Psychological Association annual meetings Jensen, Jordan, and Terebinsky⁽¹⁾ argued that personality reared its ugly head only to the extent that the team could not solve its objective

difficulties. When a team member would propose a working solution people would forget their personality difficulties and try the solution out.

Of course, once personality conflicts do develop they can have a serious effect upon the organization, primarily because they can act as a red herring and distract those involved from identifying the real, effective cause of the difficulties. An excellent example of how personality conflicts can becloud issues is given in a paper by Kurt Lewin entitled: "The Solution of a Chronic Conflict in Industry". (2) What appeared to all as being a severe personality conflict between a forelady and the chief mechanic in a clothing manufacturing plant turned out to be the consequence of a poorly defined allocation of responsibilities which led to difficulties in repairing machine breakdowns. Given half a chance most people, despite large personality and ability differences, will learn to work together efficiently and them will learn to enjoy each other.

III. BRIDGING THE GAP BETWEEN ACADEMIC RESEARCH AND ITS PRACTICAL APPLICATIONS

It was mentioned earlier that the gap between laboratory results and their application in real life is not restricted to the social sciences but is also true for the physical sciences. Yet there is no great problem in applying the results of academic research in the physical sciences to the needs of industry and the government. This is the result of the development of a large and highly competent, experienced, mediating profession -- the engineers. Chemical engineers, mechanical engineers, electronic engineers, etc., are, as a profession, at home both with the basic research done in the universities and the actual needs and realities of the line organizations.

The social sciences lack a similar profession. True, social scientists are playing a greater and greater role in industry and government and a

social engineering profession is slowly emerging. But it is growing up like Topsy, it is developing in an unplanned manner. This is a rather inefficient way of doing things. A reasoned plan, even though it may be mistaken in many ways, is generally more efficient in getting things done then letting 'nature' take its course unaided. Steps should be taken to set up a viable social engineering profession as soon as possible. Industry, government, and the interested professional disciplines should organize a social engineering curriculum in the American colleges and universities, modelled after the physical engineering curricula. It should lead to a terminal Bachelor or Master degree -- not a Doctorate -- and turn out people who are at home both in the world of the academic investigator and the practical administrator. The prime responsibility of these engineers will be to eliminate the pitfalls and difficulties to be found in the present attempts of applying academic research. In addition, such a profession can have another important impact, it can revitalize many aspects of contemporary academic thinking and research in the social sciences.

The gap between practical problems and basic research has affected the nature of the basic research. Unfortunately, many of the problems which intrigue the university investigators are inapplicable and irrelevant as far as the administrator is concerned. He is not altogether wrong in his criticism. Many of the problems confronting the administrator are as challenging, are as exciting as are the most so-called profound problems in basic theory. If only they could be communicated to the academic investigator in a language which would excite his interest. This the administrator cannot do effectively. But this a social engineer would probably do most effectively since one of his main areas of specialization would be the

speaking and understanding of two languages, the language of the academician and the language of the administrator.

With this we see something that is rather common when proposing solutions to social problems -- what appears to be a good solution for one problem can, upon closer consideration, be seen to serve as a solution for other, seemingly independent problems as well. A social unit is generally a complex, interdependent whole. A problem in such a unit is a result of some underlying dislocation and hence is generally a symptom among other symptoms. A good solution by going beyond the symptom is therefore found to have a greater over-all effectiveness than originally expected.

BIBLIOGRAPHY

- 1. Jensen, B. T., N. Jordan, and S. J. Terebinsky, The Development of Cooperation Among Three-man Crows in a Simulated Man-machine Information Processing System. To be published in J. Social Psychol.
- 2. Lewin, K., The Solution of a Chronic Conflict in Industry. Chapter 8 in Resolving Social Conflicts, Harpers and Bros., New York, 1948.
- 3. Rice, A. K., Productivity and Social Organization: The Ahmedabad Experiment. Tavistock publications, London, 1958.
- 4. Royce, J., The Psychology of Invention. Psychol. Rev., 1898, 5, pp. 113-134.
- 5. White, R. K. and R. Lippit, Autocracy and Democracy: An Experimental Inquiry. Harper and Bros., New York, 1960.
- . Whyte, Killiam, The Organization Man, Simon & Schuster, 1956.